WEST Search History

DATE: Tuesday, March 18, 2003

Set Name Query side by side		Hit Count	Set Name result set		
DB=USPT,PGPB; PLUR=YES; OP=ADJ					
L13	111 and L12	177	L13		
L12	roof\$	67779	L12		
L11	((428/920 428/921)!.CCLS.)	2551	L11		
L10	roof\$ and (428/920-921.ccls.)	0	L10		
DB=DWPI; PLUR=YES; OP=ADJ					
L9	L8 and 17	78	L9		
L8	(fiber or fibre)	414527	L8		
L7	thermoset\$ same thermoplastic same (fire or flame)	280	L7		
DB=USPT; PLUR=YES; OP=ADJ					
L6	L4 and l3	18	L6		
L5	L4 and l4	62393	L5		
L4	roof\$	62393	L4		
L3	(fiber or fibre) same 12	207	L3		
L2	(resist\$ or retard\$) same 11	793	L2		
L1	thermoset\$ same thermoplastic same (fire or flame)	906	L1		

END OF SEARCH HISTORY

Polymer Index [1.1] 018; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82; R00835 G0566 G0022 D01 D11 D10 D12 D51 D53 D58 D63 D84 F41 F89; H0317; H0022 H0011; P1150; P1310 Polymer Index [1.2] 018; ND01; ND07; N9999 N7192 N7023; N9999 N6177*R; N9999 N6600; N9999 N6042*R; N9999 N5856; K9701 K9676; Q9999 Q7512; K9892; Q9999 Q7885*R; Q9999 Q9289 Q9212 Polymer Index [1.3] 018; B9999 B5243*R B4740 Polymer Index [1.4] 018; G2891 D00 Si 4A; S9999 S1183 S1161 S1070; A999 A419 Polymer Index [2.1] 018; P0500 F* 7A Polymer Index [2.2] 018; ND01; ND07; N9999 N7192 N7023; N9999 N6177*R; N9999 N6600; N9999 N6042*R; N9999 N5856; K9701 K9676; Q9999 Q7512; K9892; Q9999 Q7885*R; Q9999 Q9289 Q9212 Polymer Index [2.3] 018; B9999 B4397 B4240; K9712 K9676 Polymer Index [2.4] 018; G2891 D00 Si 4A; S9999 S1183 S1161 S1070; A999 A419

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1996-013167 Non-CPI Secondary Accession Numbers: N1996-033293

Generate Collection

Print

CODE

UNSON

L7: Entry 12 of 38

File: DWPI

Dec 12, 1995

DERWENT-ACC-NO: 1996-039426

DERWENT-WEEK: 199604

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Composite cut-resistant laminate for protecting a photovoltaic module - consists of stacked thermoplastic and glass fibre layers that are laminated together and bonded to the module in a hot-pressing operation

INVENTOR: NATH, P; VOGELI, C N

PATENT-ASSIGNEE:

ASSIGNEE UNITED SOLAR SYSTEMS CORP

PRIORITY-DATA: 1994US-0243410 (May 16, 1994)

PATENT-FAMILY:

PUB-NO LANGUAGE PUB-DATE PAGES MAIN-IPC

US 5474620 A December 12, 1995 009 H01L031/048

APPLICATION-DATA:

PUB-NO APPL-DATE APPL-NO DESCRIPTOR

US 5474620A May 16, 1994 1994US-0243410

INT-CL (IPC): H01 L 31/048

ABSTRACTED-PUB-NO: US 5474620A

BASIC-ABSTRACT:

A composite cut-resistant laminate (25) for encapsulating and protecting the light-incident surface (22) of a photovoltaic module (10), consists of a plurality of stacked layer pairs (25a,b/25c,d/25e,f). Each pair consists of a <u>thermoplastic</u> layer (25b,d,f) and a sheet of woven or non-woven glass fibre material (25a,c,e). The composite is completed by a transparent protective surfacing layer (25g). Composite laminate (25) is simultaneously laminated and bonded to surface (22) of photovoltaic module (10) under heat and pressure in press (38,40). Under heat and pressure, thermoplastic layers (25b,d,f) soften and penetrate glass fibre sheets (25a,c,e) to form a void-free whole.

ADVANTAGE - The composite laminate protects photovoltaic modules from cuts and mechanical damage to standards prescribed by Underwriters Laboratories.

CHOSEN-DRAWING: Dwq.1,2/7

TITLE-TERMS: COMPOSITE CUT RESISTANCE LAMINATE PROTECT PHOTOVOLTAIC MODULE CONSIST STACK THERMOPLASTIC GLASS FIBRE LAYER LAMINATE BOND MODULE HOT PRESS OPERATE

DERWENT-CLASS: A18 A32 A85 L03 U12 X15

CPI-CODES: A11-B09A1; A11-C01C; A12-E11B; A12-S08B; A12-S08D2; A12-S08F; L04-E05D;

EPI-CODES: U12-A02A; U12-A02A4D; X15-A02;

ENHANCED - POLYMER - INDEXING:

L7: Entry 30 of 38 File: DWPI

DERWENT-ACC-NO: 1984-053956

DERWENT-WEEK: 198409

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Solar heat panel casing - comprises fibrous material with amalgamated binder,

and has inner layer for weather protection and insulation

INVENTOR: SUNDQUIST, C R

PATENT-ASSIGNEE:

ASSIGNEE CODE
SUN STAR SYST AB SUNSN
SUNDQUIST I SUNDI

PRIORITY-DATA: 1983WO-SE00210 (May 26, 1983), 1982SE-0003281 (May 27, 1982)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SE 8203281 A			011	
EP 109425 A		E	000	
GB 2138933 A	October 31, 1984		000	
NL 8320164 A			000	
ZA 8303444 A			000	

DESIGNATED-STATES: BE FR

CITED-DOCUMENTS:No.Citns.; US 4167935 ; US 4271825

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
SE 8203281A	May 27, 1982	1982SE-0003281	
EP 109425A	May 26, 1983	1983EP-0901749	
GB 2138933A	May 26, 1983	1983GB-0001980	
NL 8320164A	May 26, 1983	1983NL-0020164	
ZA 8303444A	May 13, 1983	1983ZA-0003444	

INT-CL (IPC): F24J 3/02

ABSTRACTED-PUB-NO: SE 8203281A

BASIC-ABSTRACT:

<u>Solar</u> panel casing is made of <u>fibre</u> material with addition of binder. It is moulded to desired shape and stability of its construction can be changed by varying the density of the fibre material.

The collector comprises a cover glass, absorber casing. The casing comprises a <u>fibrous</u> layer, insulation of lower density <u>fibrous</u> material and high density weather protection surface layer. The <u>fibres</u> can be mineral or natural, e.g. coconut. The binder can be a phenol resin or <u>thermoplastic</u>. (Provisional Basic previously advised in Week 8405)

CHOSEN-DRAWING: Dwg.0/2

TITLE-TERMS: SOLAR HEAT PANEL CASING COMPRISE FIBRE MATERIAL AMALGAMATED BIND INNER LAYER WEATHER PROTECT INSULATE

DERWENT-CLASS: A88 Q74

CPI-CODES: A12-H; A12-R02; A12-S08D;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 5214U

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0011 0231 1277 2212 2214 2215 2488 2491 2545 2605 2665 3258 2682 3263 2723

Multipunch Codes: 014 04- 140 308 309 440 441 446 46& 476 477 50& 51& 541 543 604 606 609 613 651 722 723

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1984-023018 Non-CPI Secondary Accession Numbers: N1984-040591 L9: Entry 5 of 78

File: DWPI

Jan 27, 1999

DERWENT-ACC-NO: 1999-097606

DERWENT-WEEK: 199918

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Production of a thermoplastics matrix laminate from layers of fibrous material and thermoplastics matrix material - which are placed in a casing and heated under a reduced pressure within the casing

INVENTOR: OFFRINGA, A R; TEUNISSEN, J M

PATENT-ASSIGNEE:

ASSIGNEE CODE FOKKER SPECIAL PROD BV VEFO

PRIORITY-DATA: 1997NL-1006566 (July 11, 1997)

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 EP 893235 A2
 January 27, 1999
 E
 006
 B29C070/44

 NL 1006566 C2
 February 15, 1999
 000
 B29C070/28

DESIGNATED-STATES: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

APPLICATION-DATA:

PUB-NO APPL-DATE APPL-NO DESCRIPTOR

EP 893235A2 July 10, 1998 1998EP-0202333 NL 1006566C2 July 11, 1997 1997NL-1006566

INT-CL (IPC): <u>B29 C 70/28</u>; <u>B29 C 70/40</u>; <u>B29 C 70/44</u>; <u>B29 D 9/00</u>; <u>B29 K 101:12</u>

ABSTRACTED-PUB-NO: EP 893235A

BASIC-ABSTRACT:

Thermoplastics matrix laminate is produced by placing a pack (2) of at least one layer of fibrous material and a thermoplastics material between, and in contact with, two walls (1,12) of a casing. The pressure within the casing is reduced, the pack (2) is heated to allow the matrix material to impregnate the fibrous material, and the assembly is cooled to form the laminate. Also claimed is a curved product obtained by the method above.

USE - In formation of plastics laminates such as panels or shaped products.

ADVANTAGE - Provides a method suitable for use with <u>thermoplastics</u> matrix materials, which are cheaper and more resistant to <u>fire</u> than prior <u>thermosetting</u> materials.

CHOSEN-DRAWING: Dwg.3/3

TITLE-TERMS: PRODUCE THERMOPLASTICS MATRIX LAMINATE LAYER FIBRE MATERIAL THERMOPLASTICS MATRIX MATERIAL PLACE CASING HEAT REDUCE PRESSURE CASING

DERWENT-CLASS: A26 A32

CPI-CODES: A11-B09A1; A12-S08E;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1] 018; D01 D19 D18 D31 D76 D50 D86; H0317; P1478 P1467 H0293 F00 D01 D18; S9999 S1434 Polymer Index [1.2] 018; ND01; ND07; Q9999 Q7818*R; N9999 N7192 N7023; K9654; N9999 N6177*R; N9999 N5812*R; K9949; N9999 N6611*R; N9999 N6633 N6611; K9416 Polymer Index [1.3] 018; N9999 N6440*R; J9999 J2904; J9999 J2948 J2915 Polymer Index [2.1] 018; P1081*R F72 D01 Polymer Index [2.2] 018; ND01; ND07; Q9999 Q7818*R; N9999 N7192 N7023; K9654; N9999 N6177*R; N9999 N5812*R; K9949; N9999 N6611*R; N9999 N6633 N6611; K9416 Polymer Index [2.3] 018; Q9999 Q7205 Q7114; Q9999 Q7932 Q7885; J9999 J2904; K9687 K9676; K9676*R; K9552 K9483; K9712 K9676

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1999-029018